

Claims

1. A method of tuning a filter, the filter being associated with a center frequency, comprising the steps of:
 - 5 configuring said filter as an oscillator;
 - tuning said oscillator to a desired frequency; and
 - reconfiguring said oscillator to operate as said filter with said desired frequency as said center frequency.
- 10 2. A method of tuning a filter according to claim 1, wherein said step of configuring said filter as an oscillator comprises compensating for losses in the filter.
3. A method of tuning a filter according to claim 1, wherein the filter comprises
15 a bandpass filter.
4. A method of tuning a filter according to claim 1, wherein the filter comprises a notch filter.
- 20 5. A method of tuning a filter according to claim 1, wherein the step of tuning said oscillator comprises providing a tuning signal.
6. A method according to claim 5, further comprising the step of recording the tuning signal which causes said oscillator to operate at the desired frequency.
- 25 7. A method according to claim 6, wherein the step of recording the tuning signal comprises sampling and holding the tuning signal.
8. A method according to claim 7, further comprising storing the sampled
30 signal in a register.

16. A tunable filter according to claim 15, further comprising tuning means for tuning the oscillator.

17. A method of tuning a filter, said filter comprising reactive components
5 which determine a resonant frequency of the filter, said method comprising the steps of:
configuring the filter as an oscillator; and
tuning at least one of said reactive components while the filter is configured
as said oscillator.

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18. A programmable filter comprising:

a filter circuit;
a compensation circuit; and
a memory for storing at least one digital word;

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wherein the compensation circuit is operable to configure said filter circuit
as an oscillator, whereby to permit said oscillator to be tuned to at least one desired
frequency in accordance with a tuning signal, said tuning signal being derived from
said at least one digital word, said compensation circuit further being operable to
reconfigure said oscillator to operate as said filter after tuning.

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19. A programmable filter according to claim 18, further comprising a digital to
analog converter for receiving said at least one digital word and providing said
tuning signal.

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20. A programmable filter according to claim 18, wherein the filter comprises a
bandpass filter.

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21. A programmable filter according to claim 20, wherein the memory includes a
plurality of digital words, each word corresponding to a tuning signal which
represents a desired center frequency for the filter.

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